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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,141	12/12/2000	James J. Fitzgibbon	5569-70333	5535

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CHICAGO, IL 60603-3406

EXAMINER

AU, SCOTT D

ART UNIT	PAPER NUMBER
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2612

MAIL DATE	DELIVERY MODE
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09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/735,141

Applicant(s)

FITZGIBBON ET AL.

Examiner

Scott Au

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13 is/are rejected..
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

EXAMINER'S RESPONSE

Status of Application

In response to the applicant's amendment "RCE" received on 6/27/07. The examiner has considered the new presentation of claims and applicant arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that claims 1-11 and 13 are unpatentable for the reasons set forth in this office action:

Claims 1-11 and 13 are pending.

Claim 12 is canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,2,5,7-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (6041410), Flick (6140939) and Waraksa (5412379).

Hsu teaches a garage door operating system that includes a fingerprint-communicating unit 14 which includes a fingerprint sensor 16, see figures 2 and 3. The communication unit also includes a transmitter 22 that sends a signal to the barrier operator where it is received and authenticated to open the garage door. Hsu does not

expressly show the fingerprint comparison occurring at the operator, however in an analogous art, Flock teaches that either having the authentication comparison occur at the communicating unit or at the barrier operator are both equivalent methods with various pros and cons associated with each. See figures 5 and 6. Hsu does teach that communication from the key to the lock should be encoded or encrypted to prevent cloning by interception. See col. 4 lines 52+. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the fingerprint authorization occur at the barrier operator as suggested by Flock since it would reduce the processing power necessary in the fingerprint communication unit.

In an analogous art, Waraksa teaches a rolling code used to mix up the id or unlocking code of the portable device which the rolling code changes in accordance with a predetermined algorithm (col. 20 lines 38-47) to prevent cloning and unauthorized access. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have mixed a rolling code with the Hsu-Flick transmission since this would aid in preventing unauthorized access.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu, Flick and Waraksa as applied to claims 1 and 2 above, and further in view of Nicholls.

Hsu-Flick-Waraksa does not teach the use of electroluminescent fingerprint sensors. Nicholls teaches of an electroluminescent fingerprint sensor such as TactileSense[™] by Who?Vison[™] as an improvement over other common fingerprint sensors. It would have been obvious to one skilled in the art at the time of invention to

substitute Hsu's optical fingerprint sensor for Nicholls electroluminescent fingerprint sensor since Nicholls discloses an advantage of electroluminescent fingerprint sensors over existing fingerprint sensors, such as the immunity to the 'dry finger problem' that existed in fingerprint sensing technologies at the time of invention (Nicholls, pp 5).

Who?Visontm also suggests the integration of such sensors into physical access control devices ("xlvision.com/spinoffs").

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu, Flick and Waraksa as applied to claim 1 above, and further in view of Toyoda.

Hsu-Flick-Waraksa does not teach the use of Charged Coupled Devices (CCDs). Toyoda et al. teaches the use of CCDs to sense fingerprints in the production of identity authentication devices (Fig. 1). It would have been obvious to one skilled in the art at the time of invention to substitute Hsu's optical fingerprint sensor for Toyoda et al's identity authentication device using a CCD since Toyoda et al suggest that his device be used to manage entrance and exit of individuals in restricted areas (Col 1, lines 38-40) and the use of Toyoda et al's identification device using CCD would provide an improved individual identification apparatus with a high recognition ability (Col 2, lines 38-42).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu, Flick and Waraksa as applied to claim 1 above, and further in view of Fitzgibbon (5751224).

Hsu-Flick-Waraksa does not expressly show the transmitter comprising a wall controller. In an analogous art, Fitzgibbon '224 shows the use of transmitter 34 that is a

wall controller. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have mounted the Hsu-Flick transmitter on the wall of the garage since such would eliminate the need for the user to physically carry around the transmitter.

Response to Arguments

The applicant argues that none of the references alone or in combination teach or suggest a system that determines the acceptance of both a user fingerprint and a rolling code. Hsu and Flick are not cited for teaching both fingerprint and rolling codes. Hsu teaches the use of fingerprint authentication to access a garage door. Flick teaches transmitting fingerprint codes so the authorization is processed at the secure location. Waraksa teaches the use of rolling codes. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to have the fingerprint authorization occur at the barrier operator as suggested by Flick since it would reduce the processing power necessary in the fingerprint communication unit, and it would have been obvious to have mixed a rolling code with the Hsu-Flick transmission since this would aid in preventing unauthorized access.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached at (571) 272-2981. The fax phone numbers for the organization where this application or proceeding is assigned are (571)-272-1817.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3050.

Scott Au
Examiner
Art Unit 2612



JEFFERY HOFSSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600